THE BOMBAY SMOKE NUISANCES ACT, 1912 (BOM. VII OF 1912).

G. N., G. D., No. 2810-A, dated 9th April 1913. **S. 11.**

Amended by G.N., G.D., No. 6402, dated 17th August 1915.
Amended by G.N., G.D., No. 3057, dated 1st May 1916.
Amended by G.N., G.D., No. 3836, dated 10th April 1923.
Amended by G.N., G.D., No. 3836, dated 29th January 1925.
Amended by G.N., G.D., No. 3836, dated 20th October 1925.
Amended by G.N., G.D., No. 3836, dated 11th July 1927.
Amended by G.N., G.D., No. 760 dated 26th September 1927.
Amended by G.N., G.D., No. 7249, dated 19th July 1930.
Amended by G.N., P. D., No. 7249, dated 8th July 1931.
Amended by G.N., P.D., No. 8366, dated 21st December 1931.
Amended by G.N., P. & R.D., No. 7249, dated 19th February 1935.
Amended by G.N., P. & S.D., No. 1766/34, dated 20th June 1938.
Amended by G.N., P. & S.D., No. 8366, dated 12th March 1940.
Amended by G.N., P. & S.D., No. 8366, dated 1st April 1946.

In exercise of the powers conferred by section 11 of the Bombay Smoke Nuisances Act, 1912 (Bom. VII of 1912), as subsequently modified and with the previous sanction of the Governor General in Council, the Governor in Council is pleased to make the following rules to carry out the objects of the said Act, namely :—

I.—Meetings of Commission.

1. *Ordinary meetings.*—The Commission shall meet for the transaction of business ordinarily thrice in every year in Bombay upon such day and at such hours as the Commission shall from time to time determine.

2. *Special meetings.*—The President, or the member of the Commission to whom in his absence the President may delegate his duties, may, whenever he thinks fit, and shall upon requisition made in writing by not less than three members of the Commission, call a special meeting of the Commission.

3. *Notice of meetings.*—(*a*) At least five days' notice of all meetings shall be given to each member. Such notice shall be sent by post or by such other method as may be convenient :

Provided that the accidental failure of service of notice on any member shall not invalidate the proceedings at any meeting.

(*b*) The notice shall set forth the business to be transacted at the meeting, and no business other than that so stated shall be transacted, except with the consent of the President.

4. *Quorum.*—At every meeting of the Commission three members shall constitute a quorum.

5. *President at meetings.*—Every meeting shall be presided over by the President of the Commission or, in his absence, by such member as the members present at the meeting shall choose from among their number to preside at such meeting.

6. *Adjournment for completion of business.*—The President of any meeting at which a quorum of the Commission is present may adjourn the meeting from time to time and from place to place.

7. *Business to be transacted at meeting so adjourned.*—No business shall be transacted at any meeting held in pursuance of an adjournment under rule 6 other than that which was left unfinished at the original meeting ; and it shall not be necessary to give fresh notice of such adjourned meeting.

8. *Adjournment where no quorum.*—If at the time appointed for any meeting a quorum is not present, the meeting shall stand adjourned to some future date to be appointed by the President, and five days' notice of such adjourned meeting shall be given. The members present at such adjourned meeting shall have power to dispose of all business before it, whether a quorum is present or not.

9. *Motions and amendments.*—The President may, if he thinks fit, require that every motion and amendment be duly put in writing and be proposed and seconded before it is considered by the Commission.

10. *Votes on resolutions.*—(*a*) Whenever necessary, the votes of the members of the Commission present in meeting shall be taken by the President, and the resolution supported by the greater number of votes shall be deemed to be the resolution of the Commission at such meeting.

(*b*) The President shall have a second or casting vote in all cases of equality of votes :

Provided that when votes are taken, any member present may require that the votes given on each side shall be recorded.

11. *Minutes of proceedings.*—Minutes of the proceedings of every meeting of the Commission shall be drawn up and entered in a book to be kept for the purpose, and shall be submitted at the next ordinary meeting and, when approved, shall be signed by the President of such meeting.

12. *Supply of minutes to the State Government and to members.*—A copy of the minutes of every meeting of the Commission shall, as soon as possible, be transmitted to the State Government or to such officer as the State Government may direct.

13. *Reconsideration of subject of business once disposed of.*—Except on a requisition, in writing, made and signed by not less than four members in Bombay and two members of any Sub-Committee appointed under rule 16 elsewhere, no subject of business which has once been disposed of at a meeting shall be reconsidered by the Commission within a period of six months from the date of such disposal.

14. *Fees for attendance at meetings.*—A fee of thirty rupees shall be paid to each member of the Commission who attends any meeting of the Commission and to each member of the Sub-Committee appointed under rule 16, who attends any meeting of the Sub-Committee at which a quorum is present and business is transacted, and at which he is present from the beginning to the end thereof :

Provided always that no fee shall be paid in respect of any meeting at which is transacted such business only as has been adjourned from a former meeting.

15. *Effect of continued absence of non-official member from meeting.*—When any non-official member has been absent from four consecutive meetings he shall cease to be a member of the Commission and the President shall report the fact to the State Government with a request that steps may be taken for filling up the vacancy.

16. *Sub-Committees.*—(*a*) The Commission may from time to time, in accordance with a resolution passed at a meeting, appoint Sub-Committees of its members for the purpose of carrying into effect any of the provisions of the Act which the Commission is empowered to carry into effect, with such powers and under such instructions, direction or limitations as by such resolution may be defined; and may by a like resolution alter the constitution of, or dissolve, any such Sub-Committee.

(*b*) Two members of any such Sub-Committee shall form a quorum.

II.—Powers and Duties.

17. *Exercise of authority of the Commission.*—For the purposes of section 10 of the Act, the authority of the Commission shall be exercised by the President or by any of the members to whom the President may delegate his duties during his illness or his absence from Bombay:

Provided that any action taken by the President, or by any member exercising authority under this rule, shall be reported to the Commission at its next ordinary meeting.

18. *Duties of Inspectors.*—Every Inspector appointed under section 5 of the Act shall—

(*a*) submit reports to the Commission regarding any specified area within which, in his opinion, it is expedient that all or any of the trades and manufactures mentioned in sub-section (*1*) of section 7 of the Act should be prohibited under the said section;

(*b*) draw up and submit to the Commission a list of furnaces to be inspected under clause (*a*) of sub-section (*1*) of section 10 of the Act;

(*c*) keep records of his inspections of furnaces, and of his observations on the smoke emitted therefrom;

(*d*) submit his diaries for the information of the Commission;

(*e*) carry out the orders of the Commission as to the reporting of offences against the Act, and as to obtaining the authority of the Commission before prosecution; and

(*f*) carry out the orders of the Commission in respect of the inspection of any particular furnace, or class of furnaces, and in other respects generally for the purposes of the Act.

19. *Method of dealing with reports and diaries.*—(*a*) The President of the Commission or, in his absence, any member named by him, shall peruse the reports and diaries submitted by Inspectors, and shall issue necessary orders in accordance with the provisions of the Act.

(*b*) Such reports and diaries shall be laid before the Commission at its next meeting.

20. *Submission of Commission's recommendations to the State Government.*—Whenever the Commission is satisfied that it is expedient that any or all of the trades and manufactures mentioned in sub-section (*1*) of section 7 of the Act should be prohibited in any specified area, it may submit a recommendation to that effect to the State Government, stating reasons for making such recommendation, and giving a specification of the boundaries of such area.

III.—Emission of Smoke.

21. *Method of determining density of smoke.*—The density of smoke emitted from a furnace shall be determined by reference to Ringlemann's Smoke Gauge according to the scales described below :—

Ringlemann's Smoke Gauge consists of six squares, corresponding to scales upon a white background—

Scale 1—Consists of a white square which has no black lines across it and which is all white.

Scale 2—Consists of a white square with black lines drawn across the white background, vertically and horizontally 1 mm. in width and 9 mm. apart.

Scale 3—Consists of a white square with black lines similarly drawn, 2·3 mm. in width and 7·7 mm. apart.

Scale 4—Consists of a white square with black lines similarly drawn, 3·7 mm. in width and 6·3 mm. apart.

Scale 5—Consists of a white square with black lines similarly drawn, 5·5 mm. in width and 4·5 mm. apart.

Scale 6—The square is entirely black.

The squares described in this scale, if held at a distance of from 30 to 40 paces from the observer, present the appearance of blacks and greys of varying density, with which the colour of the smoke emitted from a furnace may be compared.

22. *Observation of density.*—The smoke emitted from a furnace or furnaces shall be held to be the smoke emitted from the chimney connected therewith, and its density for the purpose of the rules shall be observed at its exit from the chimney.

23. *Limits beyond which emission of smoke becomes an offence.*—(1) Smoke of the scales of density Nos. 1, 2 and 3 as determined in accordance with rule 21 may be emitted from furnaces for any time.

(2) Smoke of the scales of density Nos. 4 and 5, as determined in accordance with the said rule, may be emitted from furnaces for the times prescribed in respect of each such scale in the following table.

(3) Smoke of density varying from the scale of density No. 4 to the scale of density No. 5 may be emitted for times rateably reduced in accordance with the explanation to this rule, and not in excess of the times entered in column 4 of the table, provided that smoke of the scale of density No. 5 shall in no case be emitted for times in excess of those entered in column 2.

(4) Smoke of the scale of density No. 6 as determined in accordance with rule 21 is entirely prohibited and may not be emitted from any furnace.

Table of limits of Smoke.

1	2 In the case of density scale 5.	3 In the case of density scale 4.	4 In the case of densities scales 5 and 4 together.
Smoke may be emitted from a chimney serving.	For minutes per hour.	For minutes per hour.	For minutes per hour (rateably reduced in accordance with the explanation below).
One or two furnaces	2	3	2·21
Three or four furnaces	3	4	3·13
Five or six furnaces	4	5	4·05
Seven, eight or nine furnaces	5	6	4·97
Ten or more furnaces	6	7	5·89

Explanation.—For the purposes of sub-clause (3) of this rule the time during which smoke of the scale of densities Nos. 4 and 5 is emitted shall be reduced, in the case of smoke of the scale of density No. 4 in the ratio of 0·37 to 1 and in the case of smoke of the scale of density No. 5 in the ratio of 0·55 to 1.

Example.

Smoke of density scale 5 may be emitted from a chimney serving ten furnaces for 6 minutes per hour, and of density scale 4 for 7 minutes. The total time during which smoke of these densities may therefore be emitted is, when reteably reduced, $6 \times 0{\cdot}55 + 7 \times 0{\cdot}37$ or 5·89 minutes per hour.

24. *Extension of time in case of original lighting or stoking of furnaces.*—In lighting up fires in furnaces, or in stoking furnaces to raise steam, for the purpse of commencing the work of the factory, double the time prescribed in the above table shall be allowed during the first two hours, once a day.

25. *Furnaces of ocean-going steamers.*—The furnaces of the main boilers of ocean-going steamers when raising steam prior to leaving port or to moving from one part to another thereof shall be allowed, for half an hour before moving and for one hour after moving, thrice the time prescribed in the table in rule 23. Tugs while actually towing or assisting in the transportation of ocean-going steamers within the limits of the port shall also be allowed thrice the times prescribed in the said table.

26. *Altitude of chimneys from which smoke may be emitted.*—Smoke shall not be emitted from a furnace at a lower altitude than 100 feet from the firing-floor level :—

Provided that this rule shall not apply in the following cases :—

(1) Existing chimneys that are, in the opinion of the Commission, of sufficient height for the purpose of the Act.

(2) Furnaces in portable or travelling engines.

(3) Furnaces of engines which, in the opinion of the Commission, are intended for temporary purposes.

(4) Furnaces in steam-vessels.

(5) Any other furnaces especially exempted by the Commission.

27. *Issue of warning by Inspectors.*—When it appears to an Inspector that an offence has been committed under the Act in respect of any furnace, he may serve the owner of such furnace with a written warning by registered post. Such warning shall inform the owner of the furnace of the time and date of such offence, and shall be accompanied by a copy of the record of the observation taken, and it shall inform the owner that if the offence is again committed after the expiry of a period, which shall not be less than ten days, he will be liable to prosecution under the Act :—

(*i*) Provided that if in the opinion of the Inspector, material alterations in the furnace are necessary or appliances require to be fitted to the furnace, the period of warning may be extended to four months, or a longer period, if in the opinion of the Commission it is necessary.

(*ii*) Provided also that no warning need be given in the case of any steam-ship, locomotive or portable engine, before a prosecution is instituted.

28. *Record of observations.*—Records shall be kept by the Commission of the observations of the smoke from furnaces under the signature of the Inspector who has made the observations.

29. *Numbering of chimneys.*—A number shall be given to each chimney, and the number of each chimney, from which smoke is emitted in greater density or for a longer period than is allowed by these rules, shall be reported to the Commission.

IV.—Procedure regarding the submission and approval of plans under section 9-A (1).

30. *Procedure regarding the submission and approval of plans for the erection, alteration, addition to or re-erection, of furnace, flue or chimney.*—(1) Every person intending to erect, re-erect, alter or add to a furnace, flue or chimney must make an application for the purpose to the Chief Inspector of Smoke-nuisances for obtaining the approval of the Commission to the plans of the furnace, flue or chimney intended to be erected, altered, added to or re-erected. Such plans shall also show clearly the proposed alteration, addition or re-erection as the case may be.

(2) Every such application must be accompanied by two copies of the said plans, one of which, on approval of the Commission, shall be retained in the office of the Chief Inspector of Smoke- nuisances, and the other shall be returned at the time of communicating such approval to the applicant.

(3) Full particulars as to the dimensions and material of the furnace, flue or chimney, intended to be erected, altered, added to, or re-erected, as well as of the proposed alteration, addition, or re-erection as the case may be, shall be shown on the plans submitted, and the plans as approved by the Commission shall be adhered to.

(4) The plans shall comply with the following particulars :—

(*a*) The areas of flues and chimneys expressed as a percentage of the total fire grate area shall not be less than the percentage shown below against each item—

Back end or down take flue	45
Bottom flue	40
Side flues	33
Delivery flue to main	33
Main flue connected to grate having an area of less than 150 sq. ft.	30
Main flue connected to grate having an area of 150 sq. ft. or more.	25
Chimney connected to grate having an area of less than 150 sq. ft.	25
Chimney connected to grate having an area of 150 sq. ft. or more	20

(*Note.*— In the case of boilers having no fire grate; e.g., where oil fuel is used, the calculated equivalent fire grate area which would be necessary for coal as fuel should be taken.)

Provided that, in the case of boilers of the marine, locomotive, vertical and other similar type, the flues and chimneys shall not be of less area than the corresponding smoke outlets of the smoke-box or uptake forming an integral part of the structure.

(*b*) The flues and chimneys shall be air-tight and of substantial design and material, and dampers, where required to be fitted, shall be of the same area as the flue passages.

(*c*) All bends of the flues to the chimneys shall have the corners well rounded off so as to allow easy flow of gases through the flues. Every flue shall have a minimum width of 11 inches.

(*d*) Furnace doors shall be substantial and well fitted and shall have an air-regulating apparatus.

Provided that nothing contained in this rule shall apply to any steam vessel, railway or road locomotive or to any existing furnace, flue or chimney, except when it is altered, added to or re-erected.

(5) Nothing contained in this rule shall be deemed to derogate from the powers of the Commission to approve any plan not complying with any of the particulars specified in clause (*a*) of sub-rule (4).